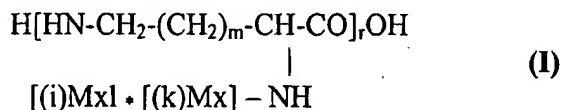


**METHOD FOR PREPARING POLYCATION BASED BIOCONJUGATES SUITABLE  
FOR TRANSPORTING DIFFERENT KIND OF ACTIVE SUBSTANCES WITHIN THE  
BODY**

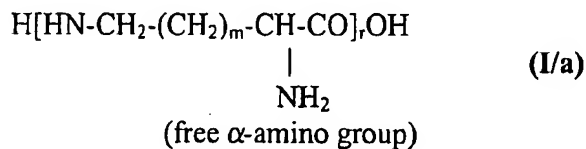


[0001] Subject of the present invention is the preparation of polycation based bioconjugates that are suitable for transporting active substances of different type within the body, that is for functioning as carriers.

[0002] New polycation bioconjugates according to the invention are prepared by coupling [(k)Mx] and/or [(i)Mx] molecules, bearing functional groups appropriate for conjugation—which may either be identical ones or of (two or more *i.e.* "x") different kind—to a given representative of isopolypeptide polycations, having free  $\alpha$ -amino groups, as carrier molecules, by chemical bonds; and the bioconjugates synthesized this way can be described by the general formula (I):



and within the polycation bioconjugates there are isopolypeptide polycation carrier molecules (further on: carrier molecules), having free  $\alpha$ -amino groups, that can be described by the general formula (I/a):



and in each carrier molecule of general formula (I/a) there are monomeres of the same configuration (*i.e.* either D-, or L-), and the individual monomeres are not linked together by their amino groups in the  $\alpha$ -positions, but by other amino groups (*i.e.* in  $\beta$ -,  $\gamma$ -,  $\delta$ -,  $\epsilon$  etc.) positions, according to the value of "m", and their structures are therefore divergent from those of the polypeptides build up by customary  $\alpha$ -amino-peptide bonds, generally occurring in mammal organisms;